

IN THE CLAIMS:

The text of all pending claims is set forth below for the convenience of the Examiner. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

1. (Previously Presented) A frequency hopping wireless communication method for performing communications between a plurality of wireless communication terminals, each wireless communication terminal having a transmitting unit for generating a radio modulation signal by multiplying an intermediate frequency band modulation signal from an intermediate frequency band modem by a local oscillation signal, and a receiving unit for generating an intermediate frequency band demodulation signal downconverted by multiplying a radio modulation signal by a local oscillation signal, and demodulating the signal in the intermediate frequency band modem, the frequency hopping wireless communication method comprising:

transmitting a reference local oscillation signal from a transmitting station;
receiving the reference local oscillation signal from the transmitting station, amplifying and band filtering the received signal, regenerating the reference local oscillation signal by an injection synchronous oscillator or an amplifier in each of the wireless communication terminals;
modulating a transmission signal in a frequency hopping system using the regenerated reference local oscillation signal; and
performing mutual communications using the transmission signal which is demodulated in each receiving wireless communication terminal of the plurality of wireless communication terminals using the regenerated reference local oscillation signal.

2. (Previously Presented) The frequency hopping wireless communication method according to claim 1, further comprising a dedicated transmitting station for transmitting only the reference local oscillation signal.

3. (Previously Presented) The frequency hopping wireless communication method according to claim 1, wherein

one wireless communication terminal of the plurality of wireless communication terminals acts as a base station or a parent station, and transmits a local oscillation signal for use in the

base station or the parent station together with a radio modulation signal, and

each child station, which is any wireless communication terminal of the plurality of wireless communication terminals other than the one wireless communication terminal acting as the base station or the parent station, receives the reference local oscillation signal transmitted by the base station or the parent station.

4. (Previously Presented) A frequency hopping wireless communication method for performing communications between a plurality of wireless communication terminals each wireless communication terminal having a transmitting unit for generating a radio modulation signal by multiplying an intermediate frequency band modulation signal from an intermediate frequency band modem by a local oscillation signal, and a receiving unit for generating an intermediate frequency band demodulation signal downconverted by multiplying a radio modulation signal by a local oscillation signal, and demodulating the signal in the intermediate frequency band modem, the frequency hopping wireless communication method comprising:

upconverting a modulation signal generated in an intermediate frequency band to a radio frequency band using a local oscillation signal functioning as a hopping synthesizer by the transmitting unit in each of the plurality of wireless communication terminals, and simultaneously transmitting a frequency hopping radio modulation signal of a single-side band wave or a both-side band wave obtained by the upconverting, and the local oscillation signal used in the upconverting; and

downconverting a received signal by the receiving unit to a first intermediate frequency band signal using a local oscillation signal frequency hopping in a pattern obtained by adding a fixed frequency offset to a frequency hopping pattern corresponding to a desired reception wave, and then extracting two signal components, a local oscillation signal component that is the local oscillation signal used in the upconverting the modulation signal, and a modulation signal component, by passing the downconverted signal through a band pass filter, and generating a product component of the two signal components, thereby regenerating a second intermediate frequency band modulation signal.

5. (Previously Presented) A frequency hopping wireless communication system comprising:

a transmitting station for transmitting a reference local oscillation signal; and
a plurality of wireless communication terminals, each wireless communication terminal having:

a receiving unit that amplifies and band filters a signal received from the transmitting station to regenerate the reference local oscillation signal by an injection synchronous oscillator or an amplifier, and generates an intermediate frequency band demodulation signal downconverted by multiplying a received radio modulation signal by the reference oscillation signal, and demodulates the intermediate frequency band demodulation signal in the intermediate frequency band modem; and

a transmitting unit that generates and transmits a radio modulation signal by multiplying an intermediate frequency band modulation signal from an intermediate frequency band modem by the reference local oscillation signal.

6. (Original) The frequency hopping wireless communication system according to claim 5, further comprising

one transmitting station for transmitting only the reference local oscillation signal.

7. (Previously Presented) The frequency hopping wireless communication system according to claim 5, wherein

one of the plurality of wireless communication terminals acts as a base station or a parent station and transmits a local oscillation signal for use in the station together with a radio modulation signal, and each child station which is any of the wireless communication terminals other than the one wireless communication terminal acting as the base station or the parent station, receives a reference local oscillation signal transmitted by the base station or the parent station.

8. (Previously Presented) A frequency hopping wireless communication system, comprising:

a plurality of wireless communication terminals, each wireless communication terminal having

a transmitting unit for generating a radio modulation signal by multiplying an intermediate frequency band modulation signal from an intermediate frequency band modem by a local oscillation signal, and

a receiving unit for generating an intermediate frequency band demodulation signal downconverted by multiplying a radio modulation signal by a local oscillation signal, and demodulating the signal in the intermediate frequency band modem, wherein

in each of the plurality of wireless communication terminals, the transmitting unit

upconverts a modulation signal generated in an intermediate frequency band to a radio frequency band using a local oscillation signal functioning as a hopping synthesizer, and simultaneously transmits a frequency hopping radio modulation signal of a single-side band wave or a both-side band wave obtained by the upconversion and the local oscillation signal used in the upconversion; and

the receiving unit downconverts a received signal to a first intermediate frequency band signal using a local oscillation signal frequency hopping in a pattern obtained by adding a fixed frequency offset to a frequency hopping pattern corresponding to a desired reception wave, and then extracts two signal components, that is, a local oscillation signal component that is the local oscillation signal used in the upconverting the modulation signal, and a modulation signal component, by passing the downconverted signal through a band pass filter, and generates a product component of the two signal components, thereby regenerating a second intermediate frequency band modulation signal.